



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,521	12/12/2003	Raj B. Durairaj	48251-00009USPT	9994

7590

05/25/2005

BAI, Benjamin
Jones Day
717 Texas, Suite 330
Houston, TX 77002-2712

EXAMINER

TRUONG, DUC

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,521

Applicant(s)

DURAIRAJ ET AL

Examiner

Duc Truong

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 12-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 052604 and 030905.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's election with traverse of Group I in the reply filed on 5/5/05 is acknowledged. The traversal is on the ground(s) that the claims in Groups I, II and III require common elements and do not require an additional search. This is not found persuasive because the search is based on different classifications of Groups I, II and III and constitute an undue burden in that the search for one of the inventions do not involve a search of the others and no errors in the reasons for the requirements has been pointed out by Applicant.

The requirement is still deemed proper and is therefore made FINAL.
Note that Applicant elects Group I with species 1 due to claims 1-11 are readable on the elected species.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Freitag et al or GB 1,079,909, both of record on 1449.

The Freitag reference discloses a process for the production of resols by the condensation reaction of formaldehyde with a condensation resin obtained by reacting a mixture of an unsaturated dihydroxy compound such as dihydroxy-diisopropyl benzene with a phenolic compound such as phenol, or p-,m- or p-cresol or cresol mixtures in the

Art Unit: 1711

presence of phosphorus acid (see Abstract) at from 30-140 C (see col. 1, line 65 onto col. 2, line 29; the claims and in the Examples).

The GB 1,079,909 reference discloses a resin obtained by reacting an aldehyde component with a phenolic component consisting of phenol (monohydroxy benzene) and a dihydroxy benzene.

Note that the phenolic reactant may be or include a mixture of the higher alkyl phenol or a mixture of one or more higher alkyl phenols with one or more dihydroxybenzenes in the presence of sulfuric or oxalic acid catalyst at the temperature of from 190 F to about 280 F (see page 1, lines 28-86).

Thus, each and every limitation of the claims is met by the reference.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freitag et al or GB 1,079,909.

The references disclose a resin obtained by contacting one or more phenolic compound with an unsaturated dihydroxy compound in the presence of an acid catalyst before reacting with an aldehyde, as stated above.


The disclosures of the references differ from the instant claims in that they do not disclose the claimed unsaturated dihydroxy compound which is 1,4-dihydroxy-2-butene nor specific structures in claims 8.

However, said 1,4-dihydroxy-2-butene is included in the claimed unsaturated dihydroxy compounds. Therefore, it would have been obvious to one of ordinary skill in the art to select the phenolic component and the unsaturated dihydroxy component from the references having the same or similar functionality with the claimed 1,4-dihydroxy-2-butene to form the products of the formulae in claim 8 since they have been shown to be effective in a similar system and thus would have been expected to provide adequate results. There is no showing of unexpected results derived from said selections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 571-272-1081. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DUCTRUONG
PRIMARY EXAMINER